

ESTABLISHED 1848



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## COLMAN'S RURAL WORLD.

HENRY J. SHAW, H. A. MUMFORD,

EDITORS.  
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Subscribers should bear in mind that the RURAL WORLD is stopped when the time paid for has expired. To keep up a constantly increasing subscription list we allow old subscribers to send a NEW name with their own for one dollar, and to add at any time NEW names at fifty cents each—but renewals without new names are at one dollar a year. We also allow subscribers to club with the twice-a-week "Republic" or the twice-a-week "Globe-Democrat" at \$1.50 a year—thus securing two one-dollar papers at that very low price. We appreciate the kind efforts of our patrons in all parts of the union in speaking good words in behalf of the RURAL WORLD, and it is to these efforts we attribute our constantly increasing circulation.

### AN IDEAL PASTURE.

If he who causes two blades of grass to grow where but one grew before, is a benefactor to his race as well as a wise and progressive citizen, what shall be said of him who takes a barren, hilly, scrub-oak Missouri pasture tract and converts it into choice grazing land, a thick carpet of perennial green, dotted here and there with a clump of hickory or a spreading oak, making a veritable paradise for stock.

This is what has been done on a portion of the State farm at Columbia, Mo., under the wise and judicious direction of Prof. H. J. Waters, the Dean of the College of Agriculture.

On the occasion of a recent visit to Columbia, the writer was so profoundly impressed with the results of a rational treatment of worthless brush-covered hill pasture, and by the conviction that the process is practicable for every farmer, requiring only a knowledge of the methods employed, that we wish to set forth herein a brief outline of this evolution from the wilderness to a spot of beauty and productiveness.

Various efforts were made with poison sprays, etc., to clear the land, but recourse was finally had to the brush scythe and the ax. The brush, after being cut and dried, was heaped up and burned and ultimately the retting stumps were knocked over and disposed of similarly. A few isolated trees were left standing as shade for stock, but sunshine on the soil was the first consideration. If the Angora goat, of which so much is expected as the "modern woodman," proves to be a practical success, the matter of clearing will be simplified.

As is well known, hilly, virgin soil does not tolerate disturbance, and on the cleared surface clover and timothy were next sown broadcast early in March, the seed simply sinking into the soil on Nature's plan of seeding and after the clover had done its biennial stunt, the enriched soil, although thin, gave the timothy a fine start and a luxuriant growth soon covered the ground. The blue grass came, and the meadow fescue, and some orchard grass, and some weeds; but the blue grass, being the best pioneer—the best ruster as the stockmen say—held the field and subsequent mowing has almost eliminated the weeds. On the 13th instant the grass was thick and strong and lush, although it had supported a steer to three acres since early summer. The occasional mowing, at a cost of twenty-five cents an acre, is all that is necessary to keep it in condition.

An important source of fertility is the food, purchased or grown on the farm, which fed in the usual way from wide, shallow troughs set up about thirty inches from the ground. All the feed given to the steers grazing this land was fed inside the pasture. No hogs were allowed. The Experiment Station has proved the superiority of feeding ground or crushed grain over the old wasteful method of feeding whole corn. Lend the steer an extra set of masticators. In the way of grinding machinery, and he will pay for machine and labor in increased weight and save the waste.

Perhaps the most important factor in maintaining this model pasture is the system of economy observed in the fixing of the pasture season. Most farmers are so disposed to see the first flush of green in May, and their store of winter feed are then so depleted, that as soon as the grass is two and a half inches high the stock is turned on and the result is that the plants are always small and weak, with insufficient root system, succumbing to the first dry spell and disease peaking entirely by winter time. Most farmers will tell you that they get but three or four months of pasture during the year except in unusually wet seasons—or on exceptionally rich lands. The systems established at the Missouri Agricultural College farm will maintain a steer to the acre for at least eight months in the year. In the latitude February, March, April and May should be the fallow months. If indeed so much time be required for the recuperation and busy growth of the soil, by holding off until June, the thick, heavy

roots full of starch, left by the rank growth of the previous year, spring up amazingly during the warm, wet vernal months, and the luxuriant herbage remains during the remainder of the year, the stock simply taking the surplus growth of a strong and healthy plant, instead of eating all of a tender young plant that never gets a fair start. The damage by trampling is reduced to a minimum on heavy sod, as the heavy growth protects the soil and roots. Even in winter, when feed is high, cattle will get good grazing, nosing about in the snow and cropping the green grass underneath.

This brings us to an estimate of the comparative values of pasturing, sowing, and dry feeding. Generally speaking, high priced lands make better returns if sown and the crop fed green in summer sowing or canned in the fall and fed from the silo, than to keep it in pasture. This estimate has its source in the wasteful, killing methods of handling pasture lands, and while it may be too early to venture the assertion that such wise and careful experiments, and the best experience of the most successful farmers, is more easily acquired in an Agricultural College than by long experience on a farm.

It is safe to say that no occupation engaged in by ordinary men requires a more careful and accurate knowledge of natural phenomena than farming. The physiology of plant growth, the physiology of animal nutrition and animal breeding, the chemistry of plants, of stock food, and of the soil, are all subjects requiring the most careful and accurate scientific knowledge, and the farmer must of necessity know the effect of these sciences upon the productiveness of the soil, and the efficiency of stock food. Farmers have begun to realize the necessity for careful training in these subjects, and to say that for the average farmer such a pursuit would be better than trifling.

In Holland and Denmark, where intensive farming is coupled with the greatest productivity, resulting in the greatest dairy region in the world, where the average man would buy the average American farm, it is a common sight to see herdsmen on the lowlands, the cows being driven in long rows across the field, daily allowed within reach. The next day they are all moved forward for another "swath," and the previous day's strip begins to grow again. When we consider such a civilization of worthless, hilly lands, it's like "getting money from home." As the boys say, it's like finding money; better still, it's like making something out of nothing. And yet the same thing out of which this grand scheme is made, is the wit and the intelligence of the farmer. We can not give you either, but we offer you the transferred ideas of men who have worked this problem out to a successful answer. What are you going to do about it?

What has become of the great western cattle ranges? Where is the cattle baron of twenty years ago? The cattle baron, not content with the golden egg, has robbed the rich western plains of their principal and interest—and he has killed the goose. The plains are there, millions of acres, in Texas, Wyoming, Nebraska, but the range has passed forever.

The practical lesson we wish to impress upon our readers is the value of mental alertness. The world is moving, the times are changing. New ideas are born, new methods tried, new facts proven. He who keeps in touch with the march of civilization will live longest and enjoy more. "To save time is to lengthen life." Saving time does not mean idleness; it means economy. It is within the reach of every farmer to produce just such a pasture from what we have described, with little expense and a little patience.

It is proper to say that such a radical change can not be made in a hurry. It will require three years, at least, after land is cleared, to bring it to its best. Furthermore, it is necessary to add that after years of grazing, unless considerable additions are made through grain feeding, there may come a time when it will pay to top dress the turf by either barnyard manure or some chemical fertilizer for which the soil calls. It is believed, however, that under ordinary conditions of feeding either steers, dairy cattle or other forced stock, ample returns will be made to the soil for whatever's taken off in the way of grazing.

Such judicious management as we have indicated will not only produce a thing of beauty and a joy forever, but an investment making good returns at a minimum of labor and care.

**THE SHAW BANQUET.**

Henry Shaw provided in his will a portion of the funds of his estate should be devoted to giving an annual banquet to florists, gardeners, fruit growers and others interested in kindred pursuits. The thirteenth anniversary celebration of this provision occurred Nov. 16th at the Mercantile Club in St. Louis, and many of the prominent members and officers of the Apple Growers' Congress were present. The occasion was largely devoted to the discussion of orchards and the apple industry generally. After and during the dinner, to which nearly one hundred and twenty were invited, the guests devoted themselves to personal discussion of mutually congenial topics and the exchange of individual views. After the dinner, numerous responses were made to toasts, all bearing upon the subjects for which these meetings were inaugurated. Dr. John Green acted as toastmaster in place of Dr. Wm. Trelease, the Director of the Missouri Botanical Garden, who was unavoidably absent. We will give in our next issue a full account of this interesting function and are also pleased to present on this page a portrait and sketch of the famous philanthropist who founded the Shaw School of Botany, and whose name is linked with the best growth of the metropolis of the Mississippi Valley.

This year's pecan crop was a bumper crop. Now they are coming in at 5¢ cents a bushel, a shipping point, and the market is flooded. Why not make a new breakfast food out of them? When it is too late some of our farmers

ST. LOUIS, MO. WEDNESDAY, NOVEMBER 26, 1902.

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EDUCATION FOR THE FARMER.

**Editor RURAL WORLD:** No tendency of recent times among farmers is more significant than the general demand for definite knowledge about the various operations of the farm. It is well recognized by all progressive farmers that success in farming, as in other vocations, comes as a result of clear, definite knowledge. This knowledge, the result of many careful experiments, and the best experience of the most successful farmers, is more easily acquired in an Agricultural College than by long experience on a farm.

The greater part of the land in my section was originally very rich, and in the period of 1865-1875 much of it was carelessly farmed. Being hillsides and moderately rolling hilltop land, some of it was pretty badly cut up into gullies. Farmers were 14 acres of this on our own farms, and in 1875, when I took hold of it, I decided that those hillsides and washed points should wear a coat of grass. A load of manure, a load of straw or brush there, and an extra four years' rest from cropping, has reduced the fourteen acres to less than ten, and this in a few small spots naturally thin.

If the soil is kept full of humus, it does not wash readily, but when the humus is exhausted then it slips and gutters with every rain of an inch or more. Commercial fertilizers used judiciously will go a long way toward maintaining fertility, as the chemists and experiment stations have shown us just what to use for best results.

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**C. D. LYON.**  
Higginport, O., Nov. 18, 1902.

### THE MANURIAL VALUE OF FARM CROPS.

**Editor RURAL WORLD:** One of the richest harvests of our farms is now with us, and unlike other farm crops, this crop can be gathered through the fall, winter and spring months, and it perhaps depends more on the skill of the farmer as to quantity and quality than any crop produced on the farm; this crop is manure—the farmers' saving bank, safety deposit and legacy to leave to his children, and to be enjoyed by himself year after year. How few realize the possibilities of manure and how many waste a great part, and in many cases, the entire crop.

Take our corn belt farmers as an example. Every acre of standing stalks left to bleach and blow away or to be cut and burned represents a value of \$1 per acre in fertility if properly gathered and fed to stock, and their feeding value is from \$1 to \$5 per acre, depending upon the manner of preparing the stalks for food.

The corn crop of Cedar Hill Jersey farm this year, estimated to be worth \$20 for the grain and the same for the stalks, plus the manural value, places the crop at \$4 per acre and owing to cold, wet weather we have only three-fourths of a crop.

Many farmers complain of the heavy work connected with handling the manure. This we admit in case of the back number farmer, but why is he a back number, with the Farmers' Institutes brought to his door to instruct him, the Agricultural College to instruct him, the agricultural press spreading the doctrine constantly and his up-to-date neighbor to set him an example.

With well constructed yards and stables, and the manure spreader, the crop may be harvested daily. At Cedar Hill we have our manure spreader arranged so that manure is loaded on wheelbarrows and run directly into spreader, then to fields every day in the week. This crop differs from most others for the reason that it is not as good as on the day it is produced, so the sooner it is applied to the land the better it is. But few farmers realize that all crops and feeds have a manural value, in most cases 50 per cent of their food value, so that a farmer can well afford to study the different feeds and learn of the ones most valuable. The dairyman is especially fortunate in this respect, as the commercial feeds he is forced to buy to balance his rations of corn and ensilage are very rich in food elements for growing crops. Take cotton seed meal as an example. The different experiment stations find that the clean meal is a high grade fertilizer in itself, and when fed to dairy cows, the resulting manure is as valuable as the meal would have been before feeding. Clover hay at 25¢ per ton is capable of returning the same value as manure. And skim milk, which is so little valued by many creamery patrons, is worth \$2 per ton for its nitrogen content.

We can find ample room for study in our farm crops and keeping up the fertility of our farms. While we look on a growing crop from the one point—its market value—it really has four values: First, it is valuable for its effect on the land on which it is produced, or is less valuable if it causes land to deteriorate

will realize that they have drawn upon the fertility of their lands until their drafts are no longer honored.

Again, I can drive two hours and find lands that when they were cleared from the original forest would not produce 15 bushels of corn per acre and find on them from 50 to 75 bushels, because they have been cared for, crop rotation practiced and all measures carefully used. The owners of these lands have added to their value year by year, little by little, and they are reaping the benefit of their labors.

**"BUFF JERSEY."**  
HENRY SHAW.

The City of St. Louis is probably indebted to no other person so deeply as it is to Henry Shaw. A very young man, he found in this city the conditions for commercial success and availed himself of them so assiduously that at middle age he retired from business, a more than independently wealthy man, and devoted the rest of an unusually long life to the development of one of the most beautiful and elevating gifts ever bestowed on a community.

Mr. Shaw was born in Sheffield, England, in 1809, and died in the city of his adoption in 1888. His business from 1833 until 1860 was in the line of hardware, and his trade reached well into the Northwest from this center. During the years of his business career he is said to have

### A MISSOURIAN AT HOME.

**Editor RURAL WORLD:** The sun went down in a blaze of glory yesterday evening as our train rolled over the Clinchian river in the upper region of Oklahoma Territory, and it was dark by the time we crossed into Kansas at Caldwell. Daylight bronzed the eastern horizon, as we drew into Kansas City the next morning. After breakfast I boarded the Chicago & Alton train for St. Louis, to ride over the richest agricultural portion of my home state.

I feel in a mood to pencil you a few lines on "Dear Old Missouri," tempered by recent experiences in other sections of our great republic. I am familiar with the state in every section, appreciate its wonderful agricultural possibilities, the excellent educational facilities provided for its farmers by the state, the numerous herds of thoroughbred and pedigree stock, the excellent orchards, barns and other evidences of the highest degree of excellence in advanced scientific agriculture scattered over its broad area, but I am also painfully aware that the great majority of the ranks and file of our farmers are a decade behind some of the sections I have recently visited, in everything that makes for progress, enlightenment, prosperity and good citizenship in its highest sense. It would enlighten these knights of the pitchfork and the hoe if they could appreciate and apply to their own case the couplet by the farmer poet, "Burns."

"O wad some Power the giftie gie us!"

To see oursels as others sees us!

It wad frae mony a blunder free us,

An foolish notion:

The class to which I refer are not new settlers, they are the old moseback element who first settled the state, who seem to have been possessed of the methods of half a century ago. Their aim immediately applied to the problem of immediate existence, they have no ambition to make two blades of grass grow where one grew before, but seem to content themselves with growing enough in a crude way to eke out a bare subsistence. I can see right now before me, in the rich section of the Missouri river bottoms, where nature has this season blessed some of them with a bountiful crop, that they are not even taking the trouble to save it, but allow it to go waste in the most shiftless way. They sneer at book farming as they call it, prate of how their fathers and grandfathers did, and spend their time whittling sticks and trying to legislate themselves into prosperity, instead of helping themselves in an intelligent way when the opportunity is thrust under their nose. The rich natural resources of Missouri enable this class of people to exist with the minimum of labor and they have no sufficient ambition to go elsewhere and see what others are doing. Fortunately for the state, this class is gradually diminishing in numbers; during the past decade there has been a large influx of new and energetic blood into the agricultural community and the aggressive end of the old set has been stimulated into greater activity to an extent that will shortly place the moseback element in the minority.

We are sorry to hear through a local exchange of the sudden illness of Will St. Freemans, of Alton, Ill., our old friend and long time contributor, Dyre. His cheerful philosophy in the face of suffering is a beautiful example for all men to emulate. We hope to hear good reports from him.

John S. Bibby of Guitman, Mo., is said to be the largest individual landholder in this country. He owns or has leased in this and adjoining states nearly 300,000 acres. He is robust in speech, dress and manner, but is a shrewd business man with an insatiable appetite for land and a hobby for litigation.

Broad speculators are saying that

there are great possibilities for profit in the grain market and that the time is ripe

for a substantial advance in the price of wheat.

Why do the speculators wait until the farmer has sold his wheat before operating for an advance? Here is a harder one: Why do the farmers rush their wheat to market all at once as soon as threshing is over?

The bulls and bears are bellowing and growling in the corn pit on Chicago Board of Trade. The "shorts" who have been betting that corn would be plenty and cheap are squirming and backing and the bulls who always have a "corner" in their eye and who are gambling on the advancement of prices are plowing and sowing. Here's the whole thing in a nutshell! If the bulls "clean up" a million dollars some body loses that amount, and vice versa. Will somebody please answer: What is the difference in principle between gambling in grain futures and playing the races or bucking the tiger at roulette, faro or craps?

A measure is now pending in Congress embodying what is known as the "Post Check" System, which is intended to furnish something more simple and accessible than money orders for ready use in making small remittances. Probably no movement of this sort ever had such unanimous support throughout the whole country, there being an almost universal endorsement of this new currency. It is in effect a greenback in denominations from 25 cents to five dollars, which passes current like any other money until the holder writes in a space on the back the name of a person to whom he wishes to send it by mail. It then becomes payable to the payee only, and on his endorsement is deposited in the bank and gets back to Washington through the usual channels and is destroyed as "mutilated currency."

The short course in the Missouri Agricultural College is a great feature of educational work. It opens up to farmers opportunities for special study during the winter months at small expense. A course in agriculture (plant production) is offered also in Animal Husbandry, Horticulture and Dairying. No examination is required. The aim in offering these courses is to give thoroughly practical instruction in subjects which are of immediate value to the practical man, instruction that can be applied directly to various occupations connected with country life. Therefore students are required to devote at least half their time to practical work in stock judging, planting, pruning and propagating plants, veterinary demonstrations, and practical work in milk testing, butter and cheese making, etc. The course begins Tuesday, December 30th, 1902, and continues until March 1st, 1903.

Some of the best students in the past have been men of several years' experience. These men as well as the students in longer courses

have found that in no other way can a farmer secure so much valuable knowledge in so short a time and at an expenditure of so little money.

## The Dairy

### THE CALF PATH.

One day through the primeval wood,  
A calf walked home, as good calves  
should;

But made a trail all bent askew.  
A crooked trail, as all calves do.

Since then two hundred years have fled,  
And, I infer, the calf is dead.

But still he left behind his trail,  
A to thereby hangs my mortal tale.

The trail was taken up next day  
By a lone dog that passed that way.

And then a wise bell-wether sheep  
Followed this trail o'er vale and steep,

And drew his flock behind him too,  
As good bell-wethers always do.

And from that day o'er hill and glade,  
Through those old woods a path was  
made,

And many men wound in and out,  
And dodged and turned and bent about,

And uttered words of righteous wrath,  
Because 'twas such a crooked path;

But still they followed—do not laugh—  
The first migrations of that calf.

And through this winding woodway  
stalked

Because he wobbled when he walked.

This forest path became a lane,  
That bent and turned and turned again;

This crooked lane became a road,  
Where many a poor horse with his load,

Toiled on beneath the burning sun,  
And traveled some three miles in one.

And thus a century and a half  
They trod the footstep of that calf.

The years passed on in swiftness fleet,  
The road became a village street,

And thus before the men were ware,  
A city's crowded thoroughfare.

And soon the central street was this  
Of a renowned metropolis.

And men two centuries and a half  
Trod in the footsteps of that calf.

Each day a hundred thousand rout  
Followed the zigzag calf about;

And o'er his crooked journey went  
The traffic of a continent.

A hundred thousand men were led  
By one calf near three centuries dead.

They followed still his crooked way,  
And lost one hundred years a day;

For thus such reverence is lent  
To well established precedent.

A moral lesson this must teach,  
Were I ordained and called to preach,

For men are prone to go it blind  
Along the cal-paths of the mind,

And work away from sun to sun  
And do what other men have done.

They follow in the beaten track,  
And out and in, and forth and back.

And still their devious course pursue  
To keep the path that others do.

But how the wise old world-gods laugh,  
Who saw that first primal calf!

And many things this tale might teach—  
But I am not ordained to preach.

—Sam W. Foss, in Boston Plain Dealer.

### CURRENT DAIRY NOTES.

The Missouri State Dairy Association did a fine thing when they elected Mr. W. W. Marple of St. Joseph, President. Mr. Marple supplemented his famous Palmyra speech, "Why not Missouri?" by the inquiry "Where are we at?" We hope for great things from this pushing, level-headed business man, who has already done much to forward the interests of Missouri dairy farmers.

Thirty-five dealers at Worcester, Mass., were caught for selling oleo as butter by George F. Whitaker, agent of the State Dairy Bureau. We hold our breath to see whether Massachusetts enforces laws of this character.

One of the most entertaining addresses made at Columbus during the recent meeting of the Missouri Dairy Association was delivered by Dr. W. McN. Miller, who occupies the chair of Pathology and Bacteriology at the State University of Missouri. The talk was on the bacteriological factor in milk, and was all the more appreciated as the Doctor was not on the regular program and had prepared no set speech, but just talked to the dairymen as he would have done to one of his classes. He illustrated in a convincing way the importance of cleanliness in milking and the necessity for cooling milk at once in order to extend its keeping qualities. We hope to present more at length to our readers Dr. Miller's researches in this important field of dairy science.

Josh Billings said: "I've seen a good many articles on milk, but the best thing I ever saw on milk was cream."

The members of the Missouri Dairy Association were glad to see Uncle John Patterson looking so young. His seventy-two years sit lightly upon him—and age has not staled his good nature nor his wit nor years of hard labor dulled the edge of his keen judgment and common sense.

OCTOBER OLEO OUTPUT.

The RURAL WORLD has stated on various occasions that much of the old "uncolored" oleo was being sold without the payment of the 10c tax and believed by the purchaser, except in the case of a hotelkeeper or restauranteur, to be butter. As a rule the price is nearly if not quite up to the price paid for butter. While it does not grow with the effulgent golden hue of old, it is also important to note that it no longer looks like butter, but has a shade or yellow which makes it pass for winter butter. Chicago "Dairy Produce," commenting upon the output and prospects, says the government is having its own trouble with the makers of oleomargarine, and as a result of the robbery of the government chemists to identify palm oil when mixed with cotton seed oil and introduced into oleomargarine, both letter and spirit of the law of 1903 is being generally violated, and an article w'h pronounced yellow color is being placed upon the market under the name of "oleo."

Milk is a perfect food. It is nature's own. It contains in right proportions all the needful elements to sustain life, promote health and create strength. It is both food and drink. We are talking about good milk. Good butter is the most digestible, most healthful fat that can be found for human food. It beats cod liver

**Old as the Pyramids**

And as little changed by the ages, is Scrofula, than which no disease, save Consumption, is responsible for a larger mortality, and Consumption is its outcome.

It affects the glands, the mucous membranes, tissues and bones; causes bickets, inflamed eyelids, sore ears, cutaneous eruptions, etc.

I suffered from scrofula, the disease affecting the glands of my neck. I did everything I could to eradicate it but without success. I then took a full dose of Hood's Sarsaparilla, and the swelling in my neck entirely disappeared and my skin resumed a smooth, healthy appearance. The cure was complete." Miss ALEXA MICHIE, 915 Scott St., Covington, Ky.

**Hood's Sarsaparilla and Pills**

Thoroughly eradicate scrofula and build up the system that has suffered from it.

## Nobody else apparently dares put his name on his lamp chimneys.

MACBETH.

If you'll send your address, I'll send you the Index to Lamps and their Chimneys, to tell you what number to get for your lamp.

MACBETH, Pittsburgh.

oil as a builder of tissues for the anemic, the consumptive, and all to whom that detestable fish oil is generally prescribed. Cheese is the most condensed food we eat; as a flesh maker it has no equal. It is cheaper than meat, more digestible than cereals (when ripened) and affords a delicious item of the daily menu. The Kentucky Colonel said: "There ain't no bad whiskey, some's better." Those who have learned to discriminate in cheese can not quite say that of this protid, but he might safely say, "There is no bad cheese except the green uncured kinds, which are hard to digest, and the overripe kinds, which need an undertaker." A well-ripened cheddar or granulated "Longhorn" is an article of diet every strenuous American should cultivate.

Our regret at seeing the old warehouse of Missouri's Dairy Association—Mr. J. L. Erwin—resign his treasure box, is tempered by the knowledge that the financial affairs of the society are in good hands. Mr. B. C. Settles of Palmyra, the newly-elected Treasurer, is a young man of acknowledged business ability and he stands high in the estimation of his fellow-townsmen and of the members.

### LATEST MARKET CONDITIONS.

There is a very marked shortage of highest grade of creamy butter in the markets. At no time has the supply in the last week been equal to the orders, and "Can't get the goods" is the best commissary men can do. The price on extra is shown by the various market centers is as follows:

	Elgin	New York	Chicago	Baltimore	St. Louis	Cincinnati	Newark, N. J.	Buffalo	St. Paul	Minneapolis	Milwaukee
Oct. 1, 1902	... \$4.09	... 27	138.40	23.4	27	25	27	27	27	27	27
Oct. 10, 1902	... 45.53	... 27	90.71	21.3	27	25	27	27	27	27	27
Oct. 19, 1902	... 74.07	... 27	105.31	20.9	27	25	27	27	27	27	27
Oct. 28, 1902	... 55.43	... 27	100.33	22.7	27	25	27	27	27	27	27

oil mixed the chemists have apparently failed to detect it in a manner definite enough to furnish evidence in court.

The result of this scheme has been to greatly increase the sales of the so-called "uncolored" until the figures for October ran up to 64,000 fifty-pound tubs, compared with 65,553 last year, 74,076 the year before and 55,143 for October, 1899.

The make of the Chicago factories for October of the past four years, expressed in fifty pound packages, together with Chicago's receipts of butter in packages and average price, is given below:

	Chicago's Average oleo butter price make. receipts. Extras
Oct. 1, 1902	... 14.09
Oct. 10, 1902	... 15.53
Oct. 19, 1902	... 17.07
Oct. 28, 1902	... 17.50

TODAY THE ONLY THING WHICH STANDS AS A PROTECTION TO PURE BUTTER AGAINST THE OLEOMARGARINE IS THE OLEO MAKER.

TO GET THE BEST BUTTER PURCHASE THE OLEO.

TO GET THE BEST BUTTER PURCHASE THE OLEO.</p



**Live Stock**

MARKET STEERS WHEN READY.

Under the present operation of the law of the division of labor, the production and ultimate disposition of beef involves the breeder, the feeder, the shipper, the transportation agency, the packer, the retailer and the consumer. Commission men and others may be included and some of the above enumerated factors may be united, as in some cases the breeder also finishes and ships direct to the packing house. The standard which determines grades of cattle is in some respects arbitrary and illogical, and as it is established by the stock yards people, which is synonymous with the packing interests, may be assumed to indicate the standard which suits their needs, but does not at all mean the most economic basis of feeding, buying or selling for the others interested in this industry.

The aim of the breeder should be identical with that of the feeder, and in this connection we would emphasize the need for a union of these two departments. The breeder should finish his own steers, and the reasons are so numerous and convincing that we will take this up as a separate consideration at some future date.

The aim of the breeder and feeder of beef cattle, then, should be to produce the highest type of "prime top" animal in the shortest time at the least expenditure of money and labor. What is the picture in his mind—this ideal "highest type"—which he is striving to realize in the live animal? It is a standard set by the buyer who is usually the slaughterer and wholesale dealer in beef carcasses, and "deep fat" may be used to signify the type desired. The steer must conform to all the points well known to cattlemen, but a perfect animal, perfect so far as his blood test goes, would not score "prime top," whatever at the stock yards is considered as registering the height of excellence, unless he is also "deep fat."

And by this they mean all the fat that a steer can possibly lay on. It is the home-stretch that usually puts on this fancy finish, and every student of cattle feeding knows it is made at a loss. There comes a time in the life of a growing steer when the increase in weight does not justify the feed required, and it is this final layer of fatty tissue which costs the steer.

Let us follow up this expensive fat and see what becomes of it. The packer sells it on the carcass at the same price per pound as the loin. No revolution in standards need be expected from this source.

The retailer cuts up the side and trims his cuts to suit his trade. He makes his customers take all the fat they will stand for, and the rest is chucked into the scrap barrel and sells as tallow for 2 to 3 cents a pound.

Here is a big waste which is a loss to somebody. Either the butcher must be content with less profit, bearing this loss himself, or he must make up on his patrons by charging more for his joints, steaks and chops. What does the purchaser of these items do with the extra fat? The trimming process continues in the kitchen and at the table, and the fat on the porter house (at 15¢ to 20¢) goes into the soap fat jar or at best makes different "fryings" at an exorbitant price.

The Jack Sprat far outruns the Mrs. Sprats, and barring a morsel at a tender morsel of beef fat, a large portion of the "deep fat" is wasted. It is contrary to the spirit of the modern art of husbandry to tolerate waste, just as nature abhors a vacuum. But here is waste for the feeder, the retailer and the consumer, and the query arises what are we going to do about it and how long will the feeder continue to keep his bunch eating their heads off, and how long will the retailer and consumer pay high prices for an extra fat which does not improve the quality of the meat, and is an almost absolute loss?

An experienced stockman should apply the old German adage, "the eye of the

master fattens his cattle," and add one of his own. "The eye of the master sells his cattle when they stop making a profitable growth."

## FORCING CALVES FOR BABY BEEF.

Forcing calves for baby beef, the feeder must remember that the calves are babies and must be treated as such to secure the greatest gains. The feeder who loves them and pets them and never allows a harsh word to be spoken in the feed lot will get many more pounds of gain from his steer than will the feeder who simply puts an equal amount of feed in the boxes and kicks a calf when it gets in his way. The striking difference shown by experiment in the cost of gain from calves that had been petted for six months while on skim milk, calves that had been raised in small pastures and were ordinarily tame and wild range calves emphasize this, writes H. M. Cottrell in "Live Stock World."

The feed should be fresh and palatable at every feeding, and the calves should be fed in such a way as to induce them to eat the greatest possible amount and yet come to the feed boxes hungry at every feeding. The feeding should be done regularly to the minute. Water and salt should be before them all the time, and both should be palatable. We prefer loose salt, and place it in the boxes under the sheds. Fresh salt should be placed in the boxes at least twice each week, and care must be taken to see that the salt does not cake and harden. If it does the calves will not eat enough for best results.

The best results will be obtained by feeding the grain mixed with the roughage, and the mixing is best when done in such a way that each particle of grain is taken into the mouth attaching a piece of roughage. When this is done the calves chew the greater part of the grain over a second time with the cud. Greater gains are made from each hundred pounds of gain, scouring and getting off feed, not vice versa.

In stormy weather it will pay the feeder to stay in the feed lots with the calves all day. In bad weather a calf feels "blue," just as a human being, and often will not eat. When the calf does not eat he will not gain. At such times, if the feeder who has petted his calves will bring the calf to the eat that is not eating, the calf will come around his feeder for companionship, and, after he has had a few mouthfuls of feed, will find that he is hungry and will eat a hearty meal. The calf makes a good gain from that day's feed.

Care and kindness do not cost money, but come from thoughtfulness and love for animals. They pay.

## What does the production of baby beef mean?

Nothing to the ranchman who has been pastures; a complete change in the methods of crop production and of feeding to the farmer with high-priced limited pastures.

The farmer who raises and fattens cattle steers has to furnish pasture for his cows, the yearlings, the two-year-olds, and often for the three-year-old steers. He waits three years from the time the calf is born until he realizes on the investment, and only one-fourth of his herd are cows producing calves. If the farmer will produce baby beef, he can fill his pasture to the full limit with cows producing calves, and he will realize on the calves twelve months from the date of their birth. Capital is turned annually instead of once in every three years. The farmer's grain will produce 50 to 100 percent more pounds of baby beef than it will of beef from a mature steer, and for the past three years the baby beef animal has sold for as high prices per hundred as does the average steer.

In producing baby beef, the farmer can market his heifer calves at the same price as his steers, and will usually get more for the 12-months old heifer, than he would for the same if kept until maturity.

## GETTING READY FOR WINTER.

In a short time we may expect the coming of winter and the careful farmer should be getting in readiness for it.

There can be no loss and sometimes may be gained by having the preparations for winter completed quite early in the season, so that in the event of a hard storm or severe weather, to which all parts of the country are more or less liable, the stock can be suitably accommodated and cared for. Such things are quite liable to happen at this season of the year, and much discomfort and loss are the result if the preparations are incomplete, writes E. R. Towlie in "Farm Home."

A farmer in any part of the country, and especially in the more northern portions, should not undertake to carry through the winter more stock than can be suitably sheltered and accommodated. In the northern states any other course than this should be considered the worst kind of policy to pursue, and even in the warmer and more favored portions of our country, where stock can remain outdoors most of the winter with impunity, and shelter for the animals is often considered almost superfluous, there are occasional storms and such severe weather as to result in much loss to stock that is unprotected, often enough to pay the cost of providing suitable quarters for it.

It is now getting time of year when the stock, especially cows giving milk, will do better if kept in the barn nights or stormy weather. Cows will require good attention in shelter and feed if they are expected to give much of a return in milk. The farmer, those short days, needs to be up in the morning before it is light enough to find the cows in the fields, and if bedded in the stable over night they can be kept clean, while the nature—which should always be an important item—can be conveniently saved, cared for, and applied where wanted.

As half of the year, more or less, it is necessary to keep the stock in the barn, and especially in the barns with stables, as well as all other parts of the barn—arranged so as to be the most convenient for the work of feeding and otherwise caring for all the animals. There can be much labor saved by attention to these things and this means much when hired labor is so difficult to obtain.

The stables should be made warm, with good floors, large enough for all purposes and well-lighted and ventilated. The floors of the stables should be as constructed that they can be kept reasonably dry, and the length on which the cattle stand should be adapted to the size of the animals.

There should be no undue crowding in order to get so many animals within a certain space, as this will make it difficult to cook some of the feed during a considerable part of the year.

cult and very unpleasant in milking and getting between them.

There should be in every well arranged dairy barn several pens, more or less according to the size of the barn or herd, which will be found of the greatest convenience in keeping animals separate when desirable, or for young calves, lambs, or pigs. Where the farmer is careful in having his barn and stable arrangements properly planned, the work of caring for the stock during the long winter can, as will be seen, be greatly lessened and be made pleasant and agreeable. This is a matter that all should consider as particularly important to themselves and worthy of their most earnest attention.

## THE OVERSTOCKING OF THE RANGES.

From time to time reports have reached the corn and grass states that the range is becoming overstocked and according to some of the best authorities, not capable, at least in the southwestern sections, or supporting more than two-thirds of the cattle and sheep which it could support twenty years ago. Under natural conditions these great plains, this great national pasture (except in very small portion capable of irrigation) they will remain pastures to the end of time supported vast herds or buffalo, which moved north in the spring and came south in the fall and thus allowed grass to grow and seed and thus perpetuate the supply of forage for the natural inhabitants, says "Wallace's Farmer."

When the ranchman first came he allowed his cattle to roam over a territory as large as the states of Iowa, Illinois and Missouri. By and by these ranges were cut up into smaller tracts, the ranchman having secured in some way a water supply to which his pasture was tributary. Then came the sheep man with his flock of sheep, contending for the water supply and pasture until in many sections of the country there is war, often bloody and destructive of both human and animal life, for the possession of a portion of this great pasture. It is easy to see how under such conditions pastures must lose their power of supporting live stock. Just why this is and just how it is done is our object in writing the present article.

Only a limited number of animals can be safely grazed on a definite number of acres in the range country. If too many animals are kept in one pasture, they will eat the grass very closely and besides tramp it out; the annual grasses will fail to produce seed and the perennial grasses, or those which grow from the roots, will have their crowns eaten out, particularly when grazed by sheep, and then the bitter and thorny weeds, which the sheep don't care for and which the cattle leave untouched, produce seed abundantly. The disappearance of the grass gives these weeds a chance to develop and the goats are killed out. The bad ones survive because they have more room to grow. A warfare is carried on between the good plants and the bad ones, similar in many respects to the warfare that is going on between the owners of cattle and sheep. The good plants are removed, the bad ones have a chance to grow and hence the range produces not only less good forage, but a superabundance of bad.

Then again, some soils are loosened by the trampling of hoofs, especially on the rolling lands, the dashing rains come (and there are no rains so dashing as those that fall from time to time on the desert), and finally the best parts of the soil are washed out. It is thus easy to see how overstocked means a decrease in the ability of the range to support stock and that continued, it will lead to the destruction of all but the very best of these great national pastures.

How can it be remedied? That is a question of an altogether different character, one very hard to answer. No man will undertake to improve the grazing capacity of this great pasture unless he has some kind of permanent control, either by ownership or by lease. Eventually it will result, we believe, in the leasing of this pasture by the government either directly to the ranchman, or indirectly by placing the title in the state. Farmers need have little fear of greater competition from the ranch than they have now and not nearly so much as they have had in the past. The destruction of the grazing capacity of these ranches would be a calamity to the farmers in the grain growing states, who have learned to depend upon them to a great extent for the supply of feeders for their surplus corn.

## COOKING FOOD FOR FARM STOCK.

Every farmer that wishes to care for his animals in the best way should have utensils for the heating of water and cooking feed for stock. By this we do not mean to say that it will pay to cook all kinds of feed or any one kind for all purposes, but there are many times and conditions when such apparatus can be used. We cook food for human beings for several reasons. One of these objects is to kill disease germs in the food. Cooking food for animals, says "Farmers' Review," has a tendency in the same direction. It costs something for fuel, but this cost is very largely offset by the benefits derived from conveying heat to the animal bodies and thus saving the expense of carbonaceous materials. It is cheaper to provide heat out of coal or wood than make it out of the tissues of the animal body. The comfort of the animal in the coldest days of winter is greatly increased by the warming of the drinking water and the cooking of part of the feed. The comfort of our farm animals has a commercial value to us. It has something to do with thriftiness in the stock, and this increases the possibilities of profitable feeding. One of the great advantages in the cooking of feed for stock is in being able to use for feed some classes of farm products that could not otherwise be so used. Some farmers find it advisable to cook their potatoes for stock, mixing them with meal and ground oats. The boiling of sugar beets for dairy cows precipitates the bitter principle that sometimes affects the milk. Too often the argument for and against the cooking of food for stock has been based on the increased or decreased digestibility of the feed and it has been asserted that the increased digestibility does not pay the cost of cooking. To some extent that is true, especially with certain classes of feed, but there are other advantages to be gained that certainly do make it advisable to cook some of the feed during a considerable part of the year.

## CHANGES IN BEEF CATTLE.

The "Drovers' Journal" says there has been a marked improvement in the general quality of beef cattle handled by the average American farmer, as compared with what it was a few years ago. The

farmer interested in live stock sees the change, but possibly the drover who has driven over a certain area regularly for many years is in position to better appreciate the growth. The improvement that is shown at the smaller fairs is marked, and the increased grade of quality at the larger fairs, even more pronounced. In the large markets there has been an equal, and in some respects a greater, notable improvement in cattle than might be understood, either in the show yard or on the farm. The steer that was good a score of years ago is now commonplace. The frame has been lowered, the horns shortened, the frame drawn up, and the coupling lessened, prominent bones have been modified, thickness of cuts in loin and other valueable sections have been deepened, the dressing-out per cent at the block have been increased, and in general the whole tendency has been toward enhancing the value of the steer to the producer, packer and the consumer. The progress of the beef steer has been promoted by the pure bred bull, that has introduced better blood into the herd. Evidences of this are seen in every herd by a predominance of characteristic red and roan, unmistakable evidence of the whiteface or the midnight coat of the black cattle, whose blood has been contributed in generous quantities to the general upbuilding of beef cattle of the country. The gradually increasing number of breeders and the opportunities offered by the public sale of cattle of old Columbus 17th. Six bulls of the \$5,000 Columbus 17th. Six bulls of old Columbus are also included.

But there are other good ones in the Gabbert's consignment. There are a few bulls by the prize winning son of Imported Weston Stamp, Weston Stamp 15th, and this dash of English blood on Columbus heifers has proven a great cross. Anyone wanting an out-cross in the shape of a grand bull will find it in Lord Southington, by Imported Southington, who topped the association sale in Kansas City last fall, and out of Imported Nada, and himself a prize winner at last year's American Royal. Another bull included is Hesiod's Best, by Hesiod 17th, and out of a Columbus cow—bull that is as good as his breeding would indicate. It should not take much to convince people that this sale is out of the ordinary—it is full of the very best kind of cattle. Lay your plans to attend the sale. It will take place at Kansas City November 8 and 9. Write C. R. Thomas, Stock Yards, Chicago, or Jas. E. Logan, 1208 Wyandotte street, Kansas City, Mo., for a catalogue.

**STOCK NOTES.**  
On Wednesday and Thursday, Dec. 16 and 17, the National Hereford Exchange will hold its annual southern sale at the National Stock Yards, in the fine stock pavilion, near the Eads bridge, East St. Louis, Ill. Various well known Hereford breeders in the territory tributary to St. Louis will make an offering of the best. Louis will make an offering of the best. We wish to call attention to the fact that a son of Improver and a son of Corrector will be included in this sale; as the former is dead and the latter shelved on account of old age, there are but few sons of these grand sires left. Another great attraction will be one hundred high-grade Hereford heifers, calves and yearlings. These will be exhibited in the fine stock pavilion and purchasers will have ample opportunity to thoroughly investigate them before the sale. The sale is full of the very best cattle, as the breeders have quality in their herds and now offer it for sale. High prices are not expected, and boom methods have been avoided in getting up this sale. All in all this sale will be the event of the year in Hereford circles, and those interested should write for further particulars.

**Market Report** furnished by Evans-Sunderland-Burnett Company.  
CATTLE—Trade this week continues dull, with prices a shade lower each day, steers 10c to 15c lower, while cow and heifer cattle staff declined 10c to 25c. Receipts here since December 1st over last week, and at a time when heavy receipts are not needed. Trade has been in very bad condition for the last two or three weeks. Should receipts continue anything like as heavy, we cannot expect any good of the market in the near future; however, it is our opinion that they will become much lighter, as we look for some reaction during December and would advise feeders to hold shorted cattle until after the holidays. From our best advices there will not be over 50 per cent of the fed Texas cattle marketed during the early season, and medium to pretty good kinds of natives will be used to fill the place of best grades of fed Texans, and will certainly bring better prices during January and February than at present. Receipts of stockers and feeders light and demand better on best grades, prices generally 10c to 20c higher than last week. Medium to pretty good grades shade stronger, while common classes were used principally for canners at very mean prices. Milk cows and calves in fair supply and about steady with decline noted last week. Very little change in veal calf market, bulk selling 6c to 7c per cwt.

The Cooper County Shorthorn Breeding Association's public sale at Bunceon, Mo., on the 19th, was a splendid success and was well attended. The cattle all stayed in the state, but were bought by new men. Following is a list of buyers, with prices over one hundred dollars:  
No. Name Price.  
1. Geo. Low, Vermont, ... \$115  
2. W. P. Fairfields, New Lebanon, ... 400  
3. Dr. Evans, Speed, ... 120  
4. G. W. Harland, Otterville, ... 145  
5. G. W. Halland, ... 201  
6. C. Browning, Appleton City, ... 100  
7. Dr. Evans, ... 105  
8. Dr. Evans, ... 115  
9. J. E. Blank, Prairie Home, ... 100  
10. C. C. Browning, ... 110  
11. C. E. Leonard, Bel Air, ... 130  
12. Winger Bros., ... 103  
13. D. Cordry, ... 200  
14. Dr. Evans, ... 115  
15. J. E. Blank, Prairie Home, ... 100  
16. C. C. Browning, ... 110  
17. Dr. Evans, ... 120  
18. Dr. Evans, ... 130  
19. A. L. Sponser, Hutchinson, Kan., ... 500  
20. John Finley, Otterville, ... 140  
21. Dr. Evans, ... 120  
22. G. A. Carpenter, Plough, ... 25  
23. Dr. Evans, ... 120  
24. Dr. Evans, ... 120  
25. Dr. Evans, ... 120  
26. Dr. Evans, ... 120  
27. R. D. Cordry, ... 200  
28. A. L. Sponser, Hutchinson, Kan., ... 500  
29. Dr. Evans, ... 120  
30. John Finley, Otterville, ... 140  
31. Dr. Evans, ... 120  
32. Dr. Evans, ... 120  
33. Dr. Evans, ... 120  
34. Dr. Evans, ... 120  
35. Dr. Evans, ... 120  
36. Dr. Evans, ... 120  
37. Dr. Evans, ... 120  
38. Dr. Evans, ... 120  
39. W. M. Buntz, Sheridan, ... 130  
40. C. Olendorf, Bonnville, ... 130  
41. J. Bucklow, Lohman, ... 115  
42. Dr. Evans, ... 115  
Forty head brought \$5,115; average, \$127.87.

A sale of 90 head of registered Herefords is announced for Kansas City on Monday and Tuesday, December 8 and 9. Two well known breeders with herds of size and quality are making a joint offering of the best they have. Jas. E. Logan, of Kansas City, is contributing 45 head of Sunset Herefords, and Benton Gabbert & Son, of Dearborn, Mo., are selling 45 head of Columbus Herefords. This is by no means the first opportunity the public has had to judge of the merits of the Sunset Herefords. Heretofore Dr. Logan has sold a choice consignment each year in the annual Armour-Funkhouser sale, and they have always commanded the respect of the best judges of cattle. The Sunset herd has been bred along broad lines. No money has been spent in building up this herd and it has been used with the intelligence that has won for its proprietor abundant success in other lines. Favoured by the counsel of his friend, the late K. B. Armour, Dr. Logan's herd was founded upon the best obtainable stock. Choice drafts from the Armour herd, added to by wise selections from the public offerings of other of the leading breeders, forms the foundation for the Sunset Herefords. Last spring the high class Tamplin herd was purchased. This latter herd was made up largely of the best things sold in recent years by all the great breeders and included the grand breeding bull Quartermaster, a son of Hesiod 17th. In the sale now announced Mr. Logan is determined that his first large offering shall be one to which he can point with pride. There is a grand quartet of imported cows and five fine heifers by Imported Soudan. Much of the quality of the Sunset Herefords is due to the bull Sun Grow. One of his three sons included in this sale, the Earl of Sunset Farm, may be expected to

be a good sire in the future. The market ruled steady to strong. HOGS—The early market was steady, but later in the day prices weakened and the movement was slow. SHEEP—Values show no change.

HOGS—Under light receipts Monday the market advanced 10c. During balance of week offerings were liberal and prices declined each day until a net loss of 20c was established. A good clearance was made at following values: Butchers and prime heavies, \$2.30 to \$2.40; light mixed, \$2.10 to \$2.25; heavy pigs, \$2.20 to \$2.35; light pigs, \$2.00 to \$2.15; rough heavies, \$2.50 to \$2.65.

SHEEP—Under moderate receipts, both sheep and lambs have ruled slow and lower, and the week closed with best sheep selling \$2

**Horseman**

for parties to buy a stallion for their neighborhood and get an animal at half they would have to pay in the spring. These offerings have not been pampered, but handled as any good farmer handles his horses, and there are no worn-out or barren animals in this sale. It is one of the cleanest lot of draft horses it has been our pleasure to see on one farm, and if you want an animal of this kind you cannot afford to miss this sale. Send to Messrs. Hanna & Co., Howard, Kan., for a catalog, stating where you saw this advertisement, and then attend the sale without fail.

**BLUE BULL NOTES.**

By L. E. Clement.

Imp. St. Blaise, by Hermit out of Fusce, for which \$100,000 was paid in England eleven years ago, was sold at auction last week for \$5,500. But he is now 22 years old, and therefore on the decline. He has been a great sire, and his former owner undoubtedly made a good percentage on his big investment.

At the Lexington, Kentucky, meeting several Detroit horses made a good showing. Judge Cullen won the 2:20 trot, \$1,000, after his driver had been removed and Scott Hudson put in his place. It required six heats to decide the race, Judge Cullen taking the second, fifth and sixth. His heat time was 2:15. Dorothy Wilkes won the 2:10 pace, \$1,000, in 2:04. Wild Wilton got away with the 2:25 trot, purse \$1,000, in straight heats; time, 2:16%; 2:16; 2:14%. Judge Cullen and Dorothy Wilkes were also winners at Terre Haute the previous week.

The racing establishment of A. H. & D. Morris was recently sold at auction at Sheephead Bay, and the prices received for the horses shows how valuable well bred thoroughbreds are at present. The 37 head offered realized a total of \$10,000. Beckon, a 14-year-old chestnut mare, by Pisaro-Perches, brought the highest price of the sale, \$7,000. Correction, bay mare, 14 years old, by Hymar-Mamie Gray, was knocked down for \$15,000. Breeders of the thoroughbred pay high prices for great dams as well as great sires, and this is a point breeders of the light harness horse should make a note of.

After Crescens trotted in 2:04 at Memphis several leading trainers were asked why the stallion did not succeed in going a faster mile. There was practically but one opinion expressed. Ed. Geers: "He has been in the stud too long and has not had the training sufficient for the task. I believe he is the two-minute horse, but he cannot do it without nine months' hard training." Bud Dohle: "Wonderful performances are accomplished only after months of continuous and careful training. I am of the opinion Crescens will lower his record, and regard him as the most wonderful trotter that ever lived, but I predict he will not lower his mark this season." John Splan: "Lack of condition, that is all. With proper conditioning he will trot in two minutes." Scott Hudson: "I would like to train Crescens for twelve months and I would drive him in 2:00 sure."

The two events of the Lexington, Ky., meeting that were of the most interest were the \$5,000 Futility for 2-year-olds, and the Transylvania \$6,000 stake for 2:12 trotters. The two year-stakes went to Katharine A., by Wiggins, in straight heats; time, 2:14; 2:15%. Seven horses started and three were distanced in the first heat. For the Transylvania stake 12 horses started, as fine a field as ever contested for this stake. It included Osman, Prince of Orange, Major Delmar, Miss Whitney, Francis B., Wentworth, Duke Cor., Charley Mac., Nutbeam, Waubun, Monte Carlo, Idiots and Rhythmic. Six heats were trotted. Major Delmar getting the first, Prince of Orange second and third, and Osman the fourth, fifth and sixth. Rhythmic, winner of the M. & M. stake, was last in the first heat, and was then drawn. Time, 2:09%; 2:09%; 2:07%; 2:08; 2:09; 2:09%. The 2:07% made by Prince of Orange, is the fastest ever made this race.

In considering the lines of blood that have and are producing winners, it is worth remembering that George Wilkes stands first as a sire of sires. He heads a list of stallions whose sons have produced upward of 100 standard performers. Hambletonian and Belmont were represented each by a son with upward of 100 trotters and pacers to his credit, but George Wilkes is distinguished by seven sons credited with over 100 performers. Five of these phenomenal sires descended in the maternal line from Mambrino Chief. Red Wilkes, sire of 100 performers, and Onward, with 106 representatives in the standard list, were out of daughters of Mambrino Chief. Three of George Wilkes' sons—Simmons, 2:28; Baron Wilkes, 2:15, and Alcantara, 2:20—were out of daughters of Herr's Mambrino Patchen, the best son of Mambrino Chief. It is, therefore, the blood of Hambletonian and Mambrino Chief, reflected through their sires, that has so far furnished the greatest winning combination in breeding light harness horses.

Messrs. Hanna & Co., Howard, Kan., will, on Dec. 19, 1902, sell their entire stud of registered Percherons, consisting of stallions, mares and fillies; also fine high-class jacks. These Percherons represent such excellent blood as Brillant 1271 (76); La Feste 514 (46); Fenelon 262 (38), and the famous sweepstakes mare Julia 5678 (GHS). These gentlemen consider size, bone and quality as essential elements to make a good draft horse, and in founding their stud they have combined these qualities as much as possible. When you see their offering at the sale you will think they have succeeded to a marked degree. All the stallions are service breds and have been used moderately this year. All the mares old enough have been bred this season and guaranteed breeders. One must see the brood mares in order to appreciate them. This is the first sale of registered Percherons, it is said, ever held at Kansas City, and if it is not a good one it will not be because Messrs. Hanna & Co. did not offer high-class horses. This is an excellent opportunity.

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be strangled of to perform such a duty, whereas in the healthy foot it "sheds" two to three times each year, and when the old and useless outer portion is thrown away, in this process of "shedding," it will be seen, it one takes the trouble to examine the bottom of the foot, that there is no semblance of a frog left to furnish the so-called "cushion," and no ground bearing, no real bearing on a bar shoe, either, can be obtained to avail of this much desired "cushion" (?) unless the foot is rasped or cut down to the very point of the blood circulation in the foot, and if such is resorted to, the poor animal could neither stand or walk until the foot had had an opportunity to heal again.

Therefore, when this horsehoer (?) says "the hoof (is) without any division or assistance to break the concussion," he is simply "off his trolley." To prove this, select the front foot of a horse, from which the frog has just been "shed" lift up this foot, then put it down, have a person stand behind and watch the action of this foot as the horse gradually settles his weight into it, will it not gradually expand at the heels? It most certainly will, now as there can be no "frog pressure," for there is no frog, it has "shed" the frog, "no division or assistance in the foot to break the concussion excepting that which is provided by the plantar cushion, the frog?" Most assuredly there is, and further, as the frog exerts no influence whatever to operate this opening and shutting of the foot at the heel. Does not the test that I suggest conclusively prove this? If the results prove to be as I assert, and I have tried II so many times that I know that the action of the foot at the heels will be just what I have stated it will be, then I have proved my case and Natura has with her usual care and wisdom, provided against concussion, without any cost to her.

Some have already reported that should have national reputations, and would have it carefully and persistently kept before the reading people of the country.

Big Timber, 2:13%, one of the fastest trotting stallions ever bred in Missouri and by the records the fastest stallion ever bred without Hambletonian blood, is dead. He was kicked by a mare while in the stud and had to be destroyed.

Big Timber, had he lived, would have made a successful sire. Two of his colts, owned by Michigan, have been handled and are reported as very promising. I know of only one colt sired by him in Missouri.

Headpiece, by N. S. Hall, sire of the racing stallion Colvin, 2:22%, reported as now being a gelding, in the stud at Baldwin, Mo., and should make a successful sire. All he wants is opportunity.

No section of the country is better supplied with well-bred trotting stallions than Southwest Missouri and Southeast Kansas. Nearly every county now has one more horses that have speed and the pictures look for speed is what you have already found it.

All who attended the races through Missouri when the kite track at Sedalia was bidding for patronage on the tank station plan, as held at Independence, Iowa will remember Noah Beamer and his mare Blackberry. Mr. Beamer has passed away.

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"The cause of the 'ruptured capillaries' is excessive tightness around the coronet; the blood gets into the foot, but the small veins ('capillaries') become so congested that it cannot make its round of circulation, as it were, and get out again; it is, therefore, the bursting of these small veins that causes their contents to trickle down and lodge in the lowest point of the foot at the place where the diabolization makes its appearance. There is no doubt about the animal at the point where this deposit is made appears and there is, therefore, nothing gained by cutting away the sole, nothing gained by cutting away the heel. All wants is opportunity.

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## Home Circle

Written for the RURAL WORLD.  
THANKSGIVING.

To thee, oh Lord, our hearts do we uplift  
In praise and adoration for thy gift  
Of grace, that like refreshing dew de-  
sends.

Upon us in a desert place and blende  
For blessings that attend us all our days.  
Thy tender mercies, Lord, that fall like  
showers.

Upon the earth to bless these souls of  
ours.

Are rich in heavenly grace, and humbly  
we

Ascribe the adoration of our hearts to  
thee.

Not only have we trusted that the Lord  
is good, not only has thy precious Word  
That emanated from the courts above—  
Blest revelation of thy wondrous love—  
Bastained us in our pilgrimage, and fed  
Our hungry souls each day with heavenly  
bread,

But we have also been recipients  
Of blessings that sustain these earthly  
tents.

The beauteous earth whose fullness is  
thine own

Has yielded fruitfully where we have  
sown

Or reaped where other hands have sac-  
tered seed,

And thus supplied us with each daily  
need.

But not alone for what thou hast  
bestowed

On us dear Father, but for what hath  
flowed

O'er all the land for all the people's good,  
Do we return to thee our thanks, and  
should

Each yield to thee his earthly all, the  
price

For all thy mercies, Lord, would not  
suffice.

We thank thee that our homes and na-  
tive land

Are resting in the hollow of thy hand,  
Secure from all the adverse winds that  
blow,

A goodly land where peace and plenty  
flow.

And far transcending every other gift

That hath redounded to our good, we lift  
Our hearts in grateful praise for him who  
died.

On Calvary's cross by sinners crucified,  
That we, through Him, might live for-  
evermore

With thee upon fair Canaan's blissful  
shore,

We thank thee for thy dwelling place on  
earth,

The church, where sinful man receives  
new birth

Into the everlasting fold of Christ—

For promises of life that hath sufficed

For ages past to anchor souls to their

Our hope, our life, our Immortality.

WALTER S. WHITACRE,  
Mt. Vernon, Ills.

Written for the RURAL WORLD.  
COMMON SENSE AND THE FOOD  
QUESTION.

By Jane A. L. Zabriskie, Instructor in  
Household Economics, State University,  
Columbus, Mo.

When our best friend declines our invitation  
to dinner on the ground that he has  
given up eating regular meals, and is taking instead "food tablets," we wonder to what we are coming.

Surely this is the era of the Food Faddist,  
and within the last few years we have been  
shocked at an alarming rate.

For instance, we are told by him that red pepper is essential to our health and happiness. Accordingly we dutifully buy a pound or two and proceed to anise and choke and strange over hot tomatoes and other dishes from the Hades' Menu, politely called "Mexican" and "Indian."

After a year of this inflammatory sort  
of life we are told by the Second Food Faddist that pepper of all kinds is most injurious; instead we are implored to eat salt, and when we read the astounding statement that by devouring large quantities of this substance, "Our bodies are kept in perfect electrical equilibrium, we are duly impressed with the awful vagueness of the remark, and immediately we begin a briny diet which if kept up in-

definitely would bring us to feel like a pickled mackerel.

Before this time comes, however, our attention is arrested by F. F. No. 3, who declares at the rate of a penny-a-line in the "County Chronicle" that if we would live on raw beef and water we would have glowing complexions and wonderful intellects.

The following week the rival paper, the "County Trumpet" informs us that only by turning our dinners and suppers into aesthetic nibbles at lettuce, peanuts, nasturtiums, etc., in general—"The Great Uncooked"—can we make our bodies meat and proper. Now the former menu is the latter makes up a cheerful diet for rabbits; but we are neither bacteria nor bunnies. We are intelligent men and women, masters of all the foodstuffs of the world.

A kind Providence has given us untold varieties of foods in the sea, the field, and forest. It behoves us to find out about them, and to use them to the best advantage, enjoying them and taking pride in their proper preparation.

Apropos of cooking receipts, I recently learned a new way to make a meat roll, delicious and economical. Three pounds of beef and half a pound of fat pork chopped very fine; mix, season to taste with pepper and salt, then take half a loaf of stale bread, cut in small pieces, pour boiling water over it, cover and let steam soft, mix with the meat when cool, form into a loaf, put in a buttered pan, pour in a pint of boiling hot water and bake in a moderate oven two hours, basting two or three times, and adding hot water if necessary.

Oysters, which are 90 per cent water, are low in nutritive value. "Digestible," on the other hand, may mean either of two things: First, the ease or quickness of digestion; second, the amount or the nutritive portion of the food which is finally digested and made available for the use of the body.

It can be readily seen that this latter depends upon the individuals' digesting powers, and is therefore variable. It is usually referred to as "digestibility," while "digestibility" in common usage, implies the former meaning, or function of digestion. Oysters digest easily. For this reason they are suitable for invalids and people with weak digestions, although they contain little nutrition.

Beans contain more nutriment than the average of the mass nutritions cereals which can be bought for fifteen cents; but owing to the toughness of the outer shell, leathery envelope, beans are difficult of digestion, and are not suitable for people who stay in the house and do little muscular work.

Ordinarily, clear beef tea contains no nutriment. Tender beef, rarely cooked, is both nutritious and digestible. Tough beef, although less digestible, is equally and often more nutritious.

Besides the nutritive value and the availability of foods, many of them have also a medicinal value, which affects individuals in different ways, and it is this which causes the general uncertainty, and gives such a wide opening for the food faddists and the patent food manufacturers. It is certainly a fact that strawberries agree with some people and disagree with others. The same thing is less noticeably true of lemons, and many other fruits. Some people are most painfully affected by a small dose of quinine.

It is evident that our physical idiosyncrasies are numerous and perplexing indeed.

The food question of the future, involves thus a study on the part of physicians as well as of chemists.

They answered to the call as no other army was ever before mustered, they gave the best years of their lives, endured hardships and privations, faced death in every form, encountered peril almost beyond description, much of which has been told in story and in song, that the Union might survive, that for the sake of the permanence of a free republic might be established through all the ages yet to come.

This heritage of liberty now enjoyed in this "Land of the Free," is the direct result of the work that they accomplished. The civil and religious privileges vouchsafed to the American people, the perpetuation of the best government and the greatest republic that the world has ever known, crowned by the folds of Old Glory as it waves to the breeze, is the grandest achievement of any age or of any people.

The remnant of that grand army are now verging closely onto the last roll call.

"The ranks grow thinner. Day by day  
We hear the funeral chant;

The gallant veterans, one by one,  
Follow their leader, Grant.

The battle drums are muffled now  
Upon the last redoubt.

And where the bugle's notes are still  
The boys lie mustered out."

Only a few years and the last of the gray-haired veterans will have passed away; the last requiem will have been sung, and those who followed Hooker, Hancock, Burnside, Meade, will be heroes mustered out.

"Methinks I see the last camp-fire  
Blaze up against the sky.

The angel casts the last brave name  
To the deathless roll on high,

They're gone! but still in vision fair

I see the ranks of blue.

That march in glorious column in  
Jehovah's grand review."

But their works will live after them;  
The fruits of their victory in more strongly cementing the bond of the States; its beneficial influences will be felt and realized by all the generations yet to come.

Above all, let us investigate this subject of foods. Find out what dishes are, in general, most digestible, and see that the children, and the sedentary, and the weak people have these foods and have them in the right proportion.

We need common sense—the sense of our grandmothers mixed with the intelligence and knowledge which is the birth-right of the woman of today.

DYKE.

Written for the RURAL WORLD.  
PICKLES AND PRESERVES.

Now is the time of year when pickles of all kinds are made and put away for winter use. I do not know why we seem to need acid in our blood in winter more than at other seasons of the year, but it is a fact. People who will not touch a pickle of any kind in the season of ripe fruit, will eat them greedily when cold weather comes.

"Chow Chow is a good appetizer when meat dishes are more in evidence than they are in summer. To make this pickle take one gallon of green tomatoes, chop fine, mix with them a cup of salt, let stand over night, drain off the juice, add half a gallon chopped cabbage, six large onions and six green peppers, also chopped fine. Put a quart of vinegar in the preserving kettle, add two quarts of brown sugar, a dessert spoon of ground mustard, scant teaspoon of turmeric, a ta-

blespoon each of ground cloves and allspice, two tablespoonsfuls of ground cinnamon, mix and tie in a cheese cloth and put them in the vinegar. Then add the mixed tomato, cabbage, green pepper pods and onion and boil clear, stirring frequently.

Spiced vinegar is excellent either sweet or sour for cucumbers that have been preserved in salt. Soak the salt almost entirely out of the cucumbers, then put them in spiced vinegar and let them boil until they are well cooked but not soft, then they will stay plump, are crisp and excellent.

Pear Preserves are not easy to make unless the fruit is in just the right condition. To preserve the hard pears, I boil them first in water made slightly sweet, then drain and put them in a syrup made by taking two quarts of sugar is a point of water, a few pieces of ginger root adds to the flavor of pear preserves, boil until clear and can in self-sealing jars.

"Mrs. Marx Anderson" has the best recipe for spiced peaches I have ever seen. Will she kindly give it to the circle?

The most important thing to know about a food is its nutritive value. There is the greatest error in the minds of most people regarding the two terms "nutritive" and "digestible." The "nutritive" value means the actual amount of real food in the article. Although water is essential to a dietary it does not nourish the body and is therefore not a food.

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**The Pig Pen**

## BREEDING QUESTIONS.

There is no question but that anybody can raise pigs, if he has proper facilities, but he cannot do it successfully without giving the business care and attention. In the first place I believe that it is at least desirable, if not essential, to have purebred stock to start with, but if a person allows that grades are better I think by all means he should breed them to pure-bred boars of unquestioned pedigree. It is the only way that mongrel stock can be improved. If scrub boars are constantly used on grade sows it will certainly make follow that the stock will deteriorate very rapidly. The next matter of importance is to provide a comfortable place in which to keep them. They will not prosper in out-of-the-way places, cold holes, wet cellars or nasty hog holes. They are neat animals and if given a chance will keep themselves and their pens cleaner than any other, writes J. A. McDonald, in the National Stockman.

Do not breed too young. I never use a boar that is less than a year old, nor permit a sow to receive service until at least eight months old, and it would probably be better if they were a year old. At the proper time turn your sow in with the boar, and one service is all that is required. Take her back to the pen, keeping her by herself, away from other pigs for a day or two, and make a record of the service. By this method you know to a day when to expect the pigs, and can feed the sow and prepare the pen accordingly. For when she is within a week of farrowing her condition needs to be watched carefully otherwise. The pigs in embryo are imbibed with the life blood of the sow, and it is her that the condition is in the order of improvement the pigs in embryo are so imbibed and so the vice versa.

Where the eight weeks plan of feeding is taken up, feeding twice a day is sufficient, starting in gradually and continuing so that they are on full feed the last three weeks. By feeding twice a day and with the run of clover pasture the hogs do not lay on fat, but put on meat, so that sale day they are in plump condition, mellow and solid looking, while in a shorter period of feeding they are apt to appear flabby.

As for the feed, any balanced ration will do. The following ration is one that was used very successfully on a bunch of August sale hogs: One-half of the ration consisted of soaked shell corn and the other half of oats, composed of two parts wheat middlings, one part Buffalo gluten feed, with a little oil meal and bone meal thrown in. Besides this, the bunch were supplied twice a week at mid-day with all the oats they would clean up. The above ration, in connection with the clover pasture, supplied all that was necessary to the development and growth of the little pigs and the putting on of the meat on the sow. The result of the feed was plump, mellow hogs, with prospects of having fine litters, which turned out to be the case, according to the letters received from the buyers.

After the feeding part is done the finishing touches are in order, and is one of the important features in the preparation of a sale bunch. The animals should be well washed or brushed that their skin might be free from all scurf, their tails and ears should be clipped properly and then they should be oiled, so as to give them a black glossy appearance. A good receipt for dope is one composed of two parts fish oil, one part gasoline and one part kerosene, with a little lamp black added. For dope to be used just as they go in the sale ring is one composed of equal parts of sweet oil and alcohol, which is cooling to the animal and gives its coat a glossy appearance.

## THE CRY FOR BONE.

We hear a heap about bone in hogs, and it may be worth while to think a little about it. Some of those who write about more bone and how to get it would think a little more their articles would not mislead so much. We are told over and over, says the National Stockman, and many people actually believe, that the modern hog is "deficient in bone," and that we must turn to some org. coarse-boned strain to correct this defect.

There are two kinds of deficiency in bone. One is a lack of quantity and the other is a lack of quality. There are few domestic animals that have too little bone, but there are many that have too weak bone. The way to improve the bone is not to breed to increase its size but to feed to increase its strength. In so doing the size will be increased somewhat. Rational care will also do much to improve the quality of bone. The brood sows and the sires should have plenty of exercise, they should be fed well balanced foods, they should have access to the earth or to substitutes therefor. With this kind of treatment there is little danger of raising a hog without bone enough to support all the meat he ought to carry. And with this kind of treatment the modern American type—the best that has yet been produced from both the producer's and the killer's standpoint—can be preserved. A violent cross for bone is not necessary for the man who will study the feeding and care of hogs.

## STOCK NOTES.

Last call. It is still time for parties who desire to buy choice Poland China hogs to write Mr. J. R. Young, Richards, Mo., for his catalogue. At his sale Nov. 28 you will find some of the very best stock in Missouri at reasonable prices.

VIVION & ALEXANDER,  
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C. H. JONES, R. E. S., Pawnee, III.

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Bred early fallow; also new sows chosen ready to serve. Of best breeding and individual merit. I also breed Shorthorn cattle, Hampshire and Cotswold sheep. All orders given prompt attention. Come and see or address JOHN MORRIS, Chillicothe, Mo.

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March and April farrow. Both sexes; castrated. C. C. McCUTCHEON, Canton, Ill.

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H. KAUSCHER & SON, Ashton, Mo.

## THE CARE AND FEEDING OF SALE HOGS.

In all classes of merchandise the article that is displayed at its best sells the highest, and the most successful merchant is the man that has his sale stock in the best possible shape on sale day. This same proposition will also apply to the sale of swine. The man that has his hogs in the pink of condition on sale day gets more for them than the man that has his hogs only partly prepared. The task of preparing a bunch of hogs for sale is no difficult feat, but is merely the using of good common sense, writes R. C. Hoffmann in "American Swineherd." In the first place, the sale hogs should be classed and placed together in roomy quarters, that is having a large pasture to run in, a large feeding floor and a good shaded, warm, and dry place to sleep in when it is cold and wet. They should also be provided with a cool place when it is hot. They should be handled in such a manner that any of them may be netted, which will be of great value when it comes to putting on the finishing touches, and when the buyers are examining them on sale day. Their feed should consist of a balanced ration and gradually brought in condition. Where it is possible the feeding period should extend over a period of eight weeks, but when rushed they can be pushed more, although the results are not as satisfactory, in that when the period extends for eight weeks the hogs put on meat, while in a shorter period they put on fat. Some breeders have a dislike for well conditioned stock which should not exist. The things keep the young pigs out of hog walls and away from drinking places used by adult hogs, for in such places all kinds of worm eggs are to be found.

## THE BACON BREED OF SWINE.

Large Yorkshire pigs have been bred in England for hundred years, with a view to producing lean meat instead of fat, writes H. N. Hills in "New England Homestead." They were introduced into Canada about 25 years ago and have revolutionized the hog business throughout the Dominion. In 1890 the value of the pork, bacon and hams exported from Canada was only a little over half a million dollars; but in 1900, it was \$12,800,000. Large Yorkshires were introduced into the United States about ten years ago, and, with the promise to revolutionize the hog business of this country, as they have that of Canada. In Canada the packing house of William Davies & Co. pays from \$1 to \$50 per hundred more for Yorkshires than for other breeds.

In addition to the greater value of their carcasses for packing purposes, large Yorkshires are, I believe, among the healthiest, hardiest and most prolific of all breeds. They are far less liable to disease than the fat breeds, some breeders regarding the Large Yorkshires as probably immune from cholera. They are white, extraordinarily long and very deep, affording the deep sides so much desired for breakfast bacon. The length enables them to carry large litters, and sows frequently farrow from 30 to 35 pigs at a litter, with ability to raise them all. They are quiet, pleasant disposition, easily managed, and are excellent mothers. They mature early, weighing from 100 to 200 pounds at six months; and if properly fed can be made to weigh even 400 before they are nine months old.

## THROUGH FOR THE HOGS.

Take a board one inch thick and eighteen or twenty inches wide; bevel the edges to an angle of 30 degrees, and side pieces on beveled edges should be six inches wide, allowing one inch to protect below lower edge of board that forms bottom of trough, writes G. H. Moore in "Farmer's Guide." Place a board twelve inches wide in the center, raising the board two inches from the bottom, and cover eight inches put in a partition, nailing secure to board in center and side pieces of the trough. This makes a trough that the hogs cannot get into and every hog must eat in his own department. On top of board in the center you can build a hopper where shelled corn can be put, leaving the space below large enough to cover the trough through to the trough below. If a cover is placed on this hopper it will keep all kinds of stock from eating the feed in the hopper; also storm and dirt. This trough has many advantages over others I have seen or heard of, and I will mention a few of these: Being made of inch lumber, it is light and convenient, and a sixteen-foot trough weighs only about forty or fifty pounds, and forty-eight hogs can all eat at the same time at this kind of trough. As the hog cannot get his feet into this trough, little or no mud or filth is carried into the feed, and the partitions keep the hog in his own department. This is the ideal hog trough for the farmer, as it is a money saver and certainly an agreeable surprise to the hog.

For the feed, any balanced ration will do. The following ration is one that was used very successfully on a bunch of August sale hogs: One-half of the ration consisted of soaked shell corn and the other half of oats, composed of two parts wheat middlings, one part Buffalo gluten feed, with a little oil meal and bone meal thrown in. Besides this, the bunch were supplied twice a week at mid-day with all the oats they would clean up. The above ration, in connection with the clover pasture, supplied all that was necessary to the development and growth of the little pigs and the putting on of the meat on the sow. The result of the feed was plump, mellow hogs, with prospects of having fine litters, which turned out to be the case, according to the letters received from the buyers.

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For the worm eggs come from? Not from the factory in the milk; not from the dam's milk. They are everywhere where hogs have always been kept. In the yards and pens and pastures, and young pigs should be kept away from such places as much as possible. The feeding of salt is one of the best ways of keeping worms destroyed, but this cannot be done with hogs as well as with lambs. The use of such things as charcoal, earth, coal, sulphur, wood ashes, etc., tends to prevent trouble, but the most powerful of all medicaments for swine is ordinary oil of turpentine. We consider this a wonderful medicinal medicine for hogs and it should be used right along in milk or slop for growing pigs liable to become infested with worms. The dose is from a teaspoonful to a tablespoonful, according to size, to be used two or three times a week from the time the pig is a month old up to six months of age unless it is known that worms are absent. Turpentine will also serve to help in almost any disease in hogs. When not sure what is the matter it is apparently always safest to employ turpentine and we have seen and heard of wonderful results where it had been given. For very young pigs that are showing signs of worms the fluid extract of spigelia and senna is an admirable remedy. It is given in half doses every two or three hours until purging ensues and will be found useful where pigs are having fits or are showing signs of not being able to St. Vitus' dance. Above all things keep the young pigs out of hog walls and away from drinking places used by adult hogs, for in such places all kinds of worm eggs are to be found.

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## The Markets

**WHEAT**—By sample, delivered—No. 2 red at \$6@5c W. and 70@5c E. side, where really choice worth 70@5c; No. 3 at 70@5c for poor to choice W. and 65@5c E. side; No. 4 at 60@5c W. and 65@5c E. side; reported at 54@5c; No. 2 hard at 65@5c and fancy Turkey 70@5c; No. 3 hard at 62@5c; No. 4 at 57@5c.

**CORN**—No. 2 not quotable over 45@5c, and No. 3 at 45@5c switched to elevator. Otherwise hardly any demand, and sales total weights made at 45@5c to 42c (latter poor), for No. 2, which was practically neglected, a little No. 3 selling at 44c. No. 2 white not worth over that.

**OATS**—By sample, delivered—No. 2 at 35c; No. 3 at 30@5c; No. 4 at 25@5c; No. 5 white at 33@5c; No. 3 white at 16@5c; No. 4 white at 24@5c; no grad; white at 34@5c.

**RYE**—At 45c to 48@5c.

**HARLEY**—At about 46@5c.

**PLAXSEED**—Nominal at \$1.12@1.13.

**BRAN**—Salable E. trk. basis at 65c in bulk, 68c in large and 70c in small skns, and mixed feed at 72@5c, and mids at 75@5c in 100s, according to quality. On W. side sales in 100s at 68c for bran and 80c for ships. At mill bran sells at 70@7c, and ships at 85@5c.

**HAY**—Receipts 300 tons local and 22 through; shipped 290 tons. Quot: Timothy on E. side—Choice at \$13.50, No. 1 at \$12@50; No. 2 \$10.50@11.50; lower grades at 66@50. Clover 12@12.50 for choice; light clover mixed 10@11, and heavy 8@10. Prairie, on W. side—No. 1 \$10@11; No. 2 \$9@50.

**STRAW**—Wheat on trk. 85c rye \$.50 for new and 75c for old.

**COTTON**—Spot market firm; ordinary, 65c; good ordinary, 73@5c; low middling, 7@10c; middling, 7@15c; good middling, 8@16c; middling fair, 8@11c.

**WOOL**—Missouri and Illinois—Medium combing and cloth mixed, 10@14c; clothing, 18@21c; low; braid, 17@17c; burly, 14@15c; burly hard, 11@12c; fine, 17@18c; heavy fine, 13@15c; light lamb, 17@18c; heavy and coarse lamb, 14@15c.

**BUTTER**—Firm. Quotations: Creamery—Extra, 27@5c; firsts, 24@25c; seconds, 20@22c. Dairy—Extra, 26@21c; firsts, 17@18c; grease, 4@5c. Ladie-packed—Extra, 18@19c; firsts, 17@18c. Country—Choicest fresh, 16c; poor to fair, 10@15c. Renovated—Good 10@21c.

**Eggs**—Current receipts, 20@22c. Receipts, 80c local and 450 through; shipped, 25c.

**CHEESE**—Jobbing: Twins at 12@14c; singles, 1c; daisies, 1c; 1c; 1c; longhorn, 1c; Limburger, 11@12c. Swiss—New at 12@14c; choice old at 16c; brick 12@12c.

**LIVE POULTRY**—Staggy young roosters, 8c; chickens, old hens, 8c, and heavy young, 10c; old roosters, etc., broilers, 2 lbs. and under, 10@12c; thin, small and poor less, Ducks 11@12c; Geese 7@8c. Live pigeons and squabs, per doz., 75c.

**BEEBWAX**—Quiet at 28c per lb. for prime.

**HONEY**—Quote: Comb—Dark at 12@14c; bright amber, 14@15c; family white clover at 16@17c; inferior and broken less, Extracted and strained—Southern in bbls., 60@65c, in cans, 61@67c. California, in cans, 74@76c.

**HOPS**—New—New York at 25@28c; Western at 30@32c; Bavarian at 45@50c.

**BEANS AND PEAS**—Quote, from stores: White, \$2.50 for machine-picked. Dried green peas—Scotch at 31.70; split peas at 32c; blackeyes at \$2.25; California pink (per lb.) at 35@40c; New York kidney 6c. Lima beans 4@5c; lentils 4@5c.

**BROOM CORN**—Nominally firm. Quote, per ton: Fair 55@60; common 40@60; choice at 55@75.

**POP CORN**—New white on cob at \$1.10 per 100 lbs. for pearl; 11.25@1.40 for dry rice.

**PECANS**—Average receipt about 5@6c.

**PEANUTS**—We quote: Farmers' stock—Red at 1@2c per lb.; white 2@2c.

**WALNUTS**—Selling at 40c per bu.; California at 10@10c for hard shell and 10@12c for soft shell.

**CHESTNUTS**—New West Virginia at 6c per lb.; Italian, 9@10c.

**CIDER**—Sold at \$3@3.50 per bbl.

**HICKORY NUTS**—We quote per bu.: 5c for large and \$1.25@1.50 for shellback.

**BORG CANE SUGAR**—\$1.35 per 100 lbs.

**SORGHUM**—Prime at 22@24c per gal.; inferior and old less.

**MAPLE SUGAR AND SIRUP**—New sugar at 8@10c per lb.; Canadian at 12c; maple sirup at 40@45c per gal.

**GRASS SEED**—Timothy, \$2.00@2.25; clover at 7.50@9c; new crop at 11.25@12c.

**APPLES**—Per bbl. in barrel Davis, poor, 7c @8; fair to good, 8@10c; choice, 11.25@14c; and fancy up to \$1.00@1.15. Winesapse, poor \$1.00@1.15, and choice to fancy \$1.75@2.25; willow twig and Roman beauty 10@12c.

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**APPLES**—Per bbl. in barrel Davis, poor, 7c @8; fair to good, 8@10c; choice, 11.25@14c; and fancy up to \$1.00@1.15. Winesapse, poor \$1.00@1.15, and choice to fancy \$1.75@2.25; willow twig and Roman beauty 10@12c.

**WALNUTS**—Selling at 40c per bu.; California at 10@10c for hard shell and 10@12c for soft shell.

**CHESTNUTS**—New West Virginia at 6c per lb.; Italian, 9@10c.

**CIDER**—Sold at \$3@3.50 per bbl.

**HICKORY NUTS**—We quote per bu.: 5c for large and \$1.25@1.50 for shellback.

**BORG CANE SUGAR**—\$1.35 per 100 lbs.

**SORGHUM**—Prime at 22@24c per gal.; inferior and old less.

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**GRASS SEED**—Timothy, \$2.00@2.25; clover at 7.